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EXAMINER

CUTLER, ALBERT H

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/806,228

**Applicant(s)**

NISHIOKA ET AL.

**Examiner**

ALBERT H. CUTLER

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 49, 50, 56, 58 and 62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49, 50, 56, 58 and 62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is responsive to communication filed on August 14, 2008. Claims 49, 50, 56, 58 and 62 are pending in the application and have been examined by the Examiner.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 14, 2008 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments filed August 14, 2008 have been fully considered but they are not persuasive.
4. Applicant argues, with regards to claims 49 and 62, that Yuyama is incapable of suggesting an optical system with an optical element having a variable focal length characteristic, that uses no polarizing plate, and forms an image whose brightness is independent of a polarized direction of incident light.
5. The Examiner respectfully disagrees. Yuyama et al. teaches (column 10, lines 33-37) that the lens (i.e. the optical element) of the camera section is moved along the optical axis in order to enlarge and reduce the image of the subject (i.e. to zoom in and out by varying the focal length). Therefore, the lens has a variable focal length

characteristic. As the optical element is a lens, it requires no polarizing plate, and forms an image whose brightness is independent of a polarized direction of incident light.

6. Therefore, a rejection based upon Yuyama et al. is maintained by the Examiner.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 62 recites “**an optical system** having a focal point adjusting function and **an optical system** which comprises **and** optical element”. It appears that claim 62 should recite “an optical system having a focal point adjusting function which comprises **an** optical element”, or something of similar nature. The Examiner will interpret claim 62 to recite “an optical system having a focal point adjusting function which comprises **an** optical element”. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 49, 50, 58 and 62 rejected under 35 U.S.C. 102(e) as being anticipated by Yuyama et al. (US 5,825,408).

Consider claim 49, Yuyama et al. teach:

An optical apparatus(figures 5 and 6) having a telephone function(Figures 5 and 6) depict a portable television receiver which has a camera section(106, column 9, lines 54-64). Within the device, image data can be modulated into an audio signal and sent over a telephone line(column 10, lines 25-28), and also received via a receiving unit for a telephone(column 10, lines 47-55). Note that in alternate embodiments shown in figures 4 and 17, the telephone receiver can be connected to the portable television receiver, and data can be output directly over a telephone line.) comprising:

an optical system(column 9, lines 44-64) with an optical element("lens") having a variable focal length characteristic, that uses no polarizing plate, and forms an image whose brightness is independent of a polarized direction of incident light(The lens is used to focus images to be taken by the camera section, and can be moved in order to zoom in and out, column 10, lines 33-37. Yuyama et al. teaches that the lens (i.e. the optical element) of the camera section is moved along the optical axis in order to enlarge and reduce the image of the subject (i.e. to zoom in and out by varying the focal length). Therefore, the lens has a variable focal length characteristic. As the optical element is a lens, it requires no polarizing plate, and forms an image whose brightness is independent of a polarized direction of incident light.);

an image pickup device for picking up an image formed by said optical system(CCD, column 4, lines 19-24. See also, column 9, lines 59-64 for the recording of images.);

a display(105) for displaying a picked up image(column 9, lines 61-64);  
and a memory("recording section") for storing the picked up image(column 9, lines 59-61).

Consider claim 50, and as applied to claim 49 above, Yuyama et al. further teach a viewfinder(105) for determining an image pickup range(column 9, lines 61-64, column 5, lines 21-35).

Consider claim 58, and as applied to claim 49 above, Yuyama et al. further teach a microprocessor(CPU, 34, figure 3, column 6, lines 41-48).

Consider claim 62, Yuyama et al. teach:

An optical apparatus(figures 5 and 6) having a telephone function(Figures 5 and 6 depict a portable television receiver which has a camera section(106, column 9, lines 54-64). Within the device, image data can be modulated into an audio signal and sent over a telephone line(column 10, lines 25-28), and also received via a receiving unit for a telephone(column 10, lines 47-55). Note that in alternate embodiments shown in figures 4 and 17, the telephone receiver can be connected to the portable television receiver, and data can be output directly over a telephone line.) comprising:

an optical system(column 9, lines 44-64) having a focal point adjusting function which comprises an optical element("lens") having a variable focal length characteristic, uses no polarizing plate and forms an image whose brightness is independent of a polarized direction of incident light(A lens(i.e. an optical element) is used to focus images to be taken by the camera section, and can be moved in order to zoom in and out, column 10, lines 33-37. Yuyama et al. teaches that the lens (i.e. the optical element) of the camera section is moved along the optical axis in order to enlarge and reduce the image of the subject (i.e. to zoom in and out by varying the focal length). Therefore, the lens has a variable focal length characteristic. As the optical element is a lens, it requires no polarizing plate, and forms an image whose brightness is independent of a polarized direction of incident light.);

an image pickup device for picking up the image formed by said optical system(CCD, column 4, lines 19-24. See also, column 9, lines 59-64 for the recording of images.);

a display(105) for displaying a picked up image(column 9, lines 61-64);

a memory("recording section") for storing the picked up image(column 9, lines 59-61); and

a microprocessor(CPU, 34, figure 3, column 6, lines 41-48).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuyama et al. in view of Hamblen(US 5,745,289).

Consider claim 56, and as applied to claim 49 above, Yuyama et al. does not explicitly teach that the optical apparatus comprises a diffractive optical element.

Hamblen similarly teaches a lens (L1, figure 1) of an optical system of a camera(See column 1, lines 12-17 and lines 64-67, column 3, lines 18-43).

However, in addition the teachings of Yuyama et al., Hamblen teaches that a lens(L1, figure 1) of the optical system comprises a diffractive optical element("DOE", column 1, lines 5-17, column 3, lines 18-20).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include a diffractive optical element as taught by Hamblen in the optical system taught by Yuyama et al. for the benefit of correcting for spherical



and chromatic aberration as well as aberration due to thermal expansion and contraction(Hamblen, column 1, lines 12-17).

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Kohmoto et al.(US 5,134,432) teaches of a zoom lens(13, figures 2, 3 and 4), and that a variable focal length is a characteristic of a zoom lens(column 1, lines 13-18).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AC/

/Sinh Tran/  
Supervisory Patent Examiner, Art Unit 2622